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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,765	02/07/2002	Brian Huppi	APLIP213/P2662	2916

22434 7590 08/24/2004

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EXAMINER
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OSORIO, RICARDO

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

### Office Action Summary

**Application No.**

10/072,765

**Applicant(s)**

HUPPI, BRIAN

**Examiner**

RICARDO L OSORIO

**Art Unit**

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4,8,11-29,31-35 and 37-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,8,11-29,31-35 and 37-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6-30-2004</u> . | 6) <input type="checkbox"/> Other: _____  |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 8, 11-17, 19-29, 31-34 and 37-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al (WO 99/49443).

Regarding claim 1, Rosenberg teaches of a computer mouse (Fig. 1, reference character 12 and Fig. 2, reference character 32) comprising a housing (Fig. 1, outside cover of mouse) and a rotary dial positioned relative to an external surface of the housing (Fig. 1, reference character 16, Fig. 3A, reference character 54, page 16, lines 1-4 and page 20, line 37-page 21, line 2), the housing providing a platform for sliding the mouse along a surface in order to move a cursor or pointer on a display screen of a computer system (see Fig. 1), the rotary dial rotating around an axis in order to implement a control function (page 16, line 6) in the computer system, the rotary dial rotating within a plane that is substantially parallel to the external surface of the housing (page 16, lines 1-3), the rotary dial having an engageable face for allowing a user to facilitate rotation of the rotary dial, the engageable face being completely exposed to the user (Fig. 3A, reference character 54. Note that top face is engageable and completely exposed).

Regarding claim 2, Rosenberg teaches of the control function being associated with performing an action on the display screen (page 10, lines 26-28).

Regarding claim 3, Rosenberg teaches of the control function corresponding to a scrolling feature (page 10, line 28).

Regarding claim 4, Rosenberg teaches that the control function is used to control various applications associated with a computer system (page 2, lines 18 and 19).

Regarding claim 8, Rosenberg teaches that the engageable face is substantially parallel to the external surface of the housing (Figs. 3A, reference character 54. See top face).

Regarding claim 11, Rosenberg teaches that the rotary dial is tangentially accessible to a user from the entire circumference of the rotary dial (Figs. 3A, reference character 54. The user can access the rotary dial from all sides of its circumference).

Regarding claim 12, Rosenberg teaches of a mouse for moving a cursor or pointer on a display screen (page 24, lines 17-18) comprising: a mouse housing (Fig. 1, outside cover of mouse); and a disk coupled to the mouse housing (Fig. 1, reference character 16, Fig. 3A, reference character 54, page 16, lines 1-4 and page 20, line 37-page 21, line 2), and rotatable about an axis (page 16, line 2), the disk being configured to facilitate a control function on the display screen (Fig. 3A, reference character 54, and page 16, lines 1-6), the disk having a touchable surface for rotating the disk about the axis (Fig. 3A, reference character 54. See top surface), the touchable surface being completely accessible to a finger of the user such that the disk can be continuously rotated by a simple swirling motion of the finger (Fig. 3A, reference character 54 and page 16, lines 1-3. Note that top face can be continuously rotated by swirling motion of finger).

Regarding claim 13, Rosenberg teaches that the control function is associated with performing an action on the display screen (page 10, lines 26-28).

Regarding claim 14, Rosenberg teaches that the control function corresponds to a scrolling feature (page 10, line 28).

Regarding claim 15, Rosenberg teaches that the scrolling feature allows a user to move displayed data across a viewing area on the display screen so that a new set of displayed data is brought into view in the viewing area (page 2, lines 16-17 and page 27, lines 1-2).

Regarding claim 16, Rosenberg teaches that the rotation of the rotary disk causes the displayed data to move across the viewing area of the display screen (page 2, lines 16-17 and page 27, lines 1-2).

Regarding claim 17, Rosenberg teaches that the displayed data is moved vertically or horizontally on the display screen (page 2, lines 16-17, page 10, lines 30-34 and page 27, lines 1-2).

Regarding claim 19, Rosenberg teaches that the mouse housing provides a pressing, or clicking action for performing an action on the display screen (page 10, lines 17-18).

Regarding claim 20, Rosenberg teaches of a computer mouse (Fig. 1, reference character 12 and Fig. 2, reference character 32) comprising: a mouse housing that provides a structure for moving the computer mouse along a surface and for gripping the mouse for movement thereof (see Fig. 1); a position detection mechanism operatively supported by the mouse housing, the position detection mechanism being configured for tracking the position of the mouse as its moved along the surface (page 24, lines 17-18); a disk positioned relative to an external surface of the mouse housing (Fig. 1, reference character 16) the disk being rotatably coupled to the mouse housing about an axis that is normal to the external surface of the mouse housing (Fig. 3A, reference character 54, page 16, lines 1-4 and page 20, line 37-page 21, line 2), and the having a user input receiving surface for facilitating movements thereof about the axis(Fig. 1,

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reference character 16 and Fig. 3A, reference character 54, both have a surface accessible by the user for movement); and an encoder for monitoring the rotation of the disk (page 21, lines 4-5).

Regarding claim 21, Rosenberg teaches that a substantial portion of the surface is exposed outside of the body (see Fig. 3B, reference character 68. Note that the wheel has a substantial portion its surface outside the body).

Regarding claim 22, Rosenberg teaches that the surface is completely accessible to a finger of the user (see Fig. 3A, reference character 54. Note that the top face is completely accessible to a user's finger).

Regarding claim 23, Rosenberg teaches that the disk is configured to facilitate a control function on the display screen (Fig. 3A, reference character 54, and page 16, lines 1-6).

Regarding claim 24, Rosenberg teaches that the control function corresponds to a scrolling feature (page 10, line 28).

Regarding claim 25, Rosenberg teaches that the surface corresponds to the top of the mouse housing (Fig. 1, reference character 16 and page 10, lines 19-20).

Regarding claim 26, Rosenberg teaches that the external surface corresponds to the side of the mouse housing (page 10, lines 20-21. Note that in a mouse such as the one in Fig. 1, the thumb rests or is normally placed relative to the side of the mouse body).

Regarding claim 27, Rosenberg teaches that the surface of the disk is substantially flush with a top external surface of the mouse housing (see Fig. 1, reference character 16. Note that the disk is substantially flush with the surface of the mouse body).

Regarding claim 28, Rosenberg teaches that the plane of rotation of the disk is parallel to a top external surface of the body (page 16, lines 1-3).

Regarding claim 29, Rosenberg teaches of the disk including tactile elements for increasing the feel of the disk (page 10, lines 23-24) the tactile elements are bumps extending from the user input receiving surface or voids representing removed sections of the surface (page 10, lines 23-24).

Regarding claim 31, Rosenberg teaches that the encoder is a mechanical encoder or optical encoder (page 21, lines 3-13).

Regarding claim 32, Rosenberg teaches that the mouse housing provides a pressing, or clicking action for performing an action on a display screen (page 10, lines 17-18).

Regarding claim 33, Rosenberg teaches that the clicking is actuated in a direction normal to the body (See Fig. 1, reference character 15. The click buttons are parallel to the top surface of the mouse body, and the clicking action is normal, or perpendicular, to the mouse body).

Regarding claim 34, Rosenberg further teaches of a base coupled to the body, the base being configured to make moving contact with a surface when the body is moved by the user (See Fig. 1, bottom of mouse, and page 10, lines 2-5).

Regarding claim 36, Rosenberg teaches of a positional movement detecting mechanism for moving an input pointer on a display screen (col. 10, lines 3-7 and col. 24, lines 17-18).

Regarding claim 37, Rosenberg teaches of a button, or click button, for allowing the user to make a selection on the display (Fig. 1, reference character 15, and page 10, lines 17-18).

Regarding claim 38, see claim 27, above.

Regarding claim 39, see claim 33, above.

Regarding claim 40, see claims 28 and 33, above.



Regarding claim 41, Rosenberg teaches that the disk is configured to sit in mouse housing (see Fig. 1, reference character 16).

Regarding claim 42, Rosenberg teaches that the disk recessed below, level with, or extend above the external surface of the mouse housing (see Fig 1, reference character 16).

Regarding claim 43, Rosenberg teaches the disk attached to a shaft (Fig. 5, reference character 128) that rotates within a shaft housing attached to the mouse housing (page 23, lines 1-15). The optical encoder (page 21, line 5) includes all the typical members of a mouse wheel encoder.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg (see above) in view of McLoone et al (US 2002/0158844).

Regarding claim 18, Rosenberg teaches that the wheel, or disk, can be used for scrolling a document in a window (page 10, lines 27-28).

However, Rosenberg fails to teach that side to side manipulation of the disk corresponds to horizontal scrolling, and that forwards and backwards manipulation of the disk corresponds to vertical scrolling.

McLoone teaches of a mouse having a scroll wheel, or disk (Fig. 1, reference character 30) wherein side to side manipulation of the disk corresponds to horizontal scrolling (page 4,

paragraph 37, lines 1-21), and wherein forwards and backwards manipulation of the disk corresponds to vertical scrolling (page 3, paragraph 36, lines 1-11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the side to side, as well as the forwards and backwards manipulation of the disk for the purpose of scrolling both vertically and horizontally, as taught by McLoone, in the device of Rosenberg because it makes it easy for a user to scroll an image both horizontally and vertically relative to the display screen without needing to reposition the peripheral device or repositioning the hand on the device (See McLoone, page 2, paragraph 9, lines 8-12 and paragraph 11, lines 1-8).

5. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg (see above) in view of Lin (US 2002/0154090).

Regarding claim 35, Rosenberg fails to teach that the axis is obliquely positioned relative to the base.

Lin teaches of a mouse (page 1, paragraph 15, line 5) having a rolling wheel, or disk (Figs. 5-7, reference character 11), with an axis of rotation obliquely positioned relative to the base (page 1, paragraph 17, lines 1-11, and paragraph 18, lines 1-7. Note that when the user adjusts the scrolling device (see Figs. 6-7, reference character 1) to a specific angle, the axis of rotation of the rolling wheel is then obliquely positioned relative to the base of the mouse).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the axis of rotation of the rolling wheel obliquely positioned with respect to the base, as taught by Lin, in the device of Rosenberg because the user can rotate the scrolling device to a specific angle for more comfortable operation thus reducing the strain of finger and

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wrist during operation (see Lin, page 1, paragraph 4, lines 1-3, paragraph 5, lines 2-4 and paragraph 18, line 8-9).

***Response to Arguments***

6. Applicant's arguments filed 6-2-2004 have been fully considered but they are not persuasive.

Applicant argues that while Rosenberg may state that the control knob 54 can be oriented similarly to the mouse wheel 16, he does not teach or suggest a mouse wheel 16 that can be oriented similarly to the knob 54.

Examiner disagrees because Rosenberg teaches clearly that the knob 54 can be used alternately in the mouse, remote control, etc, and that the mouse can be alternately a remote control. (see page 16, lines 1-4 and page 20, line 37-page 21, line 2). Also, the mouse wheel and the dial in Rosenberg are interchangeable since they are known to be used for the same purpose of scrolling and selection. Since the orientation of the remote control dial can be substituted for the orientation of the mouse wheel, then the orientation of the mouse wheel can also be substituted for the orientation of the dial.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricardo L. Osorio whose telephone number is 703 305-2248. The examiner can normally be reached on Monday through Thursday from 7:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala whose telephone number is 703 305-4938.

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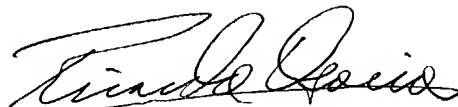
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Ricardo L. Osorio  
Examiner  
Art Unit: 2673

RLO  
August 18, 2004